



Patent
Customer No.: 006980
Docket No.: POLY8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of)	Confirmation No.: 1016
)	
SMITH, Randall G. et al.)	Group Art Unit: 2863
)	
Serial No.: 09/746,754)	Examiner: Bhat, Aditya S.
)	
Filed: 21 December 2000)	
)	
For: INITIAL CALIBRATION OF A)	
LOCATION SENSING WHITEBOARD)	
TO A PROJECTED DISPLAY)	

REPLY BRIEF IN ACCORDANCE WITH 37 CFR § 41.41

MAIL STOP APPEAL BRIEF - PATENTS

Honorable Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Atlanta, GA 30308-2216

29 January 2007

Sir:

The pending Claims of the present invention are directed to solving problems associated with the conventional method of calibrating whiteboard systems and, more specifically, to *begin* the cumbersome conventional calibration process. The Examiner, in a *Final Office Action*, rejected all the pending Claims by citing two pages of a thirty-four page whiteboard installation manual, which describes the very conventional process of calibrating a whiteboard system the present invention was designed to improve upon. The Examiner, in the *Examiner's Answer* to Appellant's *Appeal Brief*, alleges that the orientation/calibration process of the cited reference is

“substantially identical” to the claimed invention. The Examiner, however, fails to appreciate that the cited reference itself provides evidence of the novelty of the pending Claims.

The cited reference embodies the conventional way of initiating the calibration process of a whiteboard system. The cited reference fails to anticipate the elements of the claimed invention providing the solution to such conventional problems. Therefore, pursuant of the provisions of 37 C.F.R. § 41.31, 41.35, 41.37, and 41.41, this brief responds to the *Examiner’s Answer*, from Examiner Aditya S. Bhat of Art Unit 2863, dated 28 November 2006.

Appellant submits herewith its *Reply Brief to Examiner’s Answer*, with reference to the above-identified patent application. Furthermore, Appellant submits herewith a separate paper entitled *Request for Oral Hearing*, in accordance with 37 CFR § 41.47, as Appellant respectfully desires an oral hearing before the Board of Patent Appeals and Interferences.

Authorization is provided herewith to charge any fees deemed due beyond those authorized in this filing under 37 CFR § 1.17 to Deposit Account No. 20-1507, and in conformance with the requirements of 37 CFR § 41.37 and 41.47.

Response to Examiner’s Answer

Whiteboards and projectors need to be calibrated for, among other reasons, proper alignment. There are known various calibration processes to coordinate the two. The presently claimed invention is not concerned with the calibration process. Nor is the presently claimed invention concerned with various steps in setting up the whiteboard system that occur prior to the calibration process. Appellant concedes the prior art is replete with calibration processes, and various steps prior to the actual calibration process (like turning on the whiteboard system, turning on the projector, etc.).

The claimed invention relates only to the step of “initiating” the calibration process, a very specific, time-based step that informs the whiteboard system to enter the calibration process. The Examiner continues to confuse the presently claimed step of initiating the calibration process as equivalent to any step that occurs prior to the calibration process, and that is respectfully shown to be error.

The claimed invention recites a solution to the conventional problem of initiating the calibration process of electronic whiteboard systems. Specifically, the claimed invention recites a novel method for initiating the calibration process of a location sensing electronic whiteboard, wherein the step of initiating the calibration process does not occur with a keyboard stroke at the computer, but “distant a computer.”

Conventionally, and as taught in the cited reference (*i.e.*, the May 1998 SMART Board Product Manual (herein referred to as the “cited reference” or “*Manual*”)), to start the calibration process, a user began at the computer usually located in the back of the conference room, and then walked to the whiteboard in front of the conference room. The many trips back and forth in order to initiate and calibrate the whiteboard to the computer were cumbersome, inconvenient, confusing, and/or intimidating to many laypersons not familiar with the operation of the whiteboard, and inevitably disrupted the flow of the meeting.

The pending Claims recite that the step of initiating the calibration process occurs at a location distant a computer; thus, the user need not walk back and forth, from the computer to the whiteboard during the meeting to properly calibrate the whiteboard system.

1. The Examiner Redefines the Term “Initiating” by the Cited Reference

In the *Examiner’s Answer*, the Examiner ignores the ordinary and customary meaning of the term “initiating”, which is contentious in the present case. Further, the *Specification*¹ unequivocally illustrates the meaning of this term. In the face of the term’s ordinary and customary meaning, and the disclosed definition, the Examiner redefines the term by the cited reference to continue to reject the Claims, which is contrary to the procedure of examining the Claims.

The Examiner may not ignore a term’s ordinary and customary meaning. MPEP § 2111. Further, the Examiner may not interpret a term of a Claim by a cited reference when the Appellant substantiates the ordinary and customary meaning of a term by defining the term in the *Specification* in the same way. (“extrinsic evidence cannot alter any [C]laim meaning discernible from intrinsic evidence” *C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858,862 (Fed. Cir. 2004)). In the *Examiner’s Answer*, as well as in the *Final Office Action*, the Examiner redefines the term “initiating” away from the customary and ordinary meaning, as well as away from Appellant’s definition in the *Specification*, by the terms of the cited reference, and thus unsurprisingly finds that, in essence, the *Manual* is anticipating art against the inventions of the *Manual*.

“An [A]pplicant is entitled to be his or her own lexicographer and may rebut the presumption that [C]laim terms are to be given their ordinary meaning and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s).” See MPEP § 2111.01 (IV), *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

¹ Please note that the citations to the *Specification* refer to the originally-filed *Specification*.

In the present case, the Appellant first respectfully submits that the term “initiating” as used by the Appellant is the ordinary and customary meaning associated with that term. It is the Examiner who uses the *Manual* to redefine this term from its ordinary and customary meaning. Second, even if the ordinary and customary meaning of this term is to an extent different from the Appellant’s use in the *Specification*, such use in the *Specification* controls.

A. The Calibration Process - Defined

Calibration, as known to those skilled in the art, and as disclosed and defined in the *Specification*, enables “[a] computer [to] relate positions on [a] whiteboard to locations on [a] computer display device, and thus, properly interpret touch inputs detected on the surface of the electronic whiteboard.” *Specification*, Pg. 2, L. 9-12.

The conventional calibration process includes at least three steps. First, a calibration image is projected onto a whiteboard. Second, the system detects the touch(es) of the user on the whiteboard, wherein the user has approached the whiteboard, and touched where instructed from the first step of the calibration process. Third, the system calculates a relationship between the touched point(s) on the whiteboard corresponding to the projected calibration image and the position(s) of the display device. *Specification*, Pg. 5, L. 11-24, Fig. 3; *09/07/05 Response and Amendment*, Pgs. 4-5.

Appellant’s currently claimed invention, however, concerns the sole step of *initiating* the calibration process, *see Specification*, Pg. 6, L. 9-19, that is, in one embodiment the step that directly precedes the image projection on the whiteboard. Conventional systems, including the cited reference, require that the step of initiating the calibration process to occur at the computer. The action just prior to the calibration image being projected on the whiteboard (the action that

tells the system to project the image) conventionally occurs at the computer, with for example the push of a key at the keyboard. This is exemplified by the cited art reference, *i.e.*, the *Manual* (the “Next” key is pushed). The pending Claims, however, recite that initiating the calibration process occurs *distant* the computer, for example, with a remote control.

B. The Step of Initiating - Defined

The ordinary and customary meaning of the term “initiating” the calibration process means to *begin* the calibration process, that is, the next step after “initiating” is the calibration process itself.

Further, the Appellant unambiguously defines “initiating” the calibration process as that action by a user to begin the conventional three step calibration process (*i.e.*, the action prior to “a calibration image [being] projected onto a whiteboard”). *Specification, Pg. 5, L. 11-24*. The Examiner in the *Final Office Action* and the *Examiner’s Answer* continues to read out the term “initiating” from the presently claimed invention, and alleges that the present Claims are anticipated because the *Manual* illustrates a routine step of the calibration process, or a routine step that proceeds the calibration process, each of which are irrelevant to the claimed step of “initiating” the calibration process, which can only be one step in a disclosure, that step which informs the whiteboard system to enter the calibration process. It is not a moving target. The Examiner’s selection of what initiates the calibration process in the *Manual* is contrary to both the ordinary meaning of, and the claimed invention’s definition of, “initiating.”

While the Examiner is required to construe the Claims as broad as possible during examination, such construction has its limits. MPEP § 2111. Indeed, “the pending claims must

be given their broadest *reasonable* interpretation *consistent with the specification*.” *Id.* (citing *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000) (emphasis added)).

The step of initiating the calibration process is clearly defined in the *Specification*, and therefore the Examiner must give weight to this definition, and should not be permitted to allow the cited reference to somehow redefine this term. In one embodiment, the step of initiating the calibration process is defined as the step before displaying a GUI (graphical user interface) onto the electronic whiteboard. *Specification*, Pg. 2, L. 29-30. This initiating step “signals the computer to begin the calibration procedure before the computer has projected a GUI [] onto the electronic whiteboard surface.” *Id.* This recitation takes place distant the computer, and thus the Claims are novel over the *Manual*, which discloses this step occurs at a computer.

C. Analysis

The Examiner alleges that the *Manual* discloses that calibration is initiated distant the computer in Step 1. Yet Step 1 of the *Manual* is unrelated to the claimed invention. Step 4 of the *Manual* is that step that can be equated with the step of initiating the calibration process.

The ordinary and customary meaning of the step of initiating the calibration process, and Appellant’s definition of same in the *Specification*, is the step that informs the whiteboard to enter the calibration process, and is in one embodiment the step directly before the projection of a GUI onto an electronic whiteboard surface, and the pending Claims recite this step occurs distant a computer. *Specification*, Pg. 2, L. 29-30. This is unambiguously Step 4 as disclosed in the *Manual*, and as this Step 4 occurs at the computer in the *Manual*, the *Manual* does not anticipate the pending Claims.

As taught in the *Manual*, completing Step 1, which Appellant concedes can occur distant a computer, means that a user still has three more steps (Steps 2-4) to complete all of which must occur **at the computer**, before the system is informed to project a calibration image (*i.e.*, GUI) onto the board. *Manual*, Pgs. 27-28. These are the precise steps the claimed invention removes, thus providing an improved system (*see Specification*, Pg. 2, L. 12-18, 25-27 and Pg. 3, L. 13-17).

A simple thought experiment illustrates an error of the *Final Office Action*. The presently claimed step of the initiating the calibration process is that step that informs the system to enter the calibration process. The Appellant has appealed to the Examiner to ask himself the following: If Steps 1, or 2, or 3, or combinations thereof of the *Manual* are indeed equivalent to the claimed step of initiating the calibration process, what would happen if a user of the whiteboard system of the *Manual* were to stop after Steps 1, 2 and/or 3? Would the system begin the calibration process? The answer is no. Step 4 of the *Manual* must occur before the calibration process begins, and Step 4 is a click at the computer. Thus, Steps 1, 2 and/or 3 cannot be read as the step of initiating the calibration process. Only Step 4 can be so read, and as it occurs at the computer, not distant the computer, the *Manual* provides further evidence of the novelty of the present invention.

The user of the conventional system in the cited reference must initiate calibration at the computer. The claimed invention, however, removes the need of a user to revisit the computer to initiate, and also complete, calibration. As disclosed, Steps 2 through 4 require “clicking” of a mouse at the computer. *Manual*, Pgs. 27-28. The *Manual* further requires that the calibration process is initiated only after *clicking* – hence, at the computer – the “Next button”.

Thus, only after Step 4 of the cited reference occurs has the whiteboard system been informed to enter the calibration process – only Step 4 can be construed as the step of initiating the calibration process as claimed in the present case.

2. The Examiner Alleges that the Orientation/Calibration Processes in the Claimed Invention and the Cited Reference are “Substantially Identical”

The calibration process described in Appellant’s patent application and the calibration process described in the cited reference are not the same.

A. Calibration Process of Present Invention

The calibration process disclosed in Appellant’s patent application includes the following steps:

1. Project graphical user interface (GUI) on whiteboard;
2. Touch the whiteboard at one or more points indicated by GUI (such that the system detects the touches); and
3. Calculate the relationship between the touched points on the whiteboard corresponding to the projected calibration image and the positions of the display device. *Specification, Pg. 5, L. 11-24, Fig. 3.*

The pending Claims recite that the action to tell the system to project the image (to initiate calibration), occurs distant the computer (for example, with a remote control).

B. Calibration Process of Cited Reference

The calibration process disclosed in the cited reference includes the following steps:

1. Inform the whiteboard to enter an orientation mode; this can be performed at or distant from the whiteboard;
2. Preview three orientation levels – Quick, Standard, or Fine;

3. Click the orientation precision, which is to be performed at the computer;
4. **Click the “Next” button, which is performed at the computer;**
5. Project a GUI on the whiteboard surface
6. Touch the whiteboard at one or more points indicated by GUI (such that the system detects the touches); and
7. Test the orientation by moving finger across whiteboard.

Unlike the claimed invention, the *Manual’s* step of initiating the calibration process, or the step that informs the system to project the GUI (Step 4) is **performed at the computer**.

The term “initiating” is time-based, thus but for its ordinary and customary meaning, and the definition disclosed in the *Specification*, the Examiner could allege that the step of “initiating” the calibration process occurs at a variety of times, for example, when the whiteboard user wakes up in the morning, or when the user turns on the whiteboard system. Each of these steps initiates a subsequent step, which inevitably will be the downstream step of calibrating the whiteboard system.

While the Examiner might agree that the act of waking up in the morning is not the step of initiating the calibration process, or that the act of simply turning on the whiteboard system is the step of initiating the calibration process, at some point in time prior to the actual calibration process, one must “initiate” it. It is respectfully submitted that Steps 1-3 of the *Manual* are no more relevant to the patentability of the pending Claims as are the steps of waking up, or turning on the system. They are prior steps to the calibration process, but none of them are equivalent to the step of initiating calibration, as presently claimed.

Step 4 of the *Manual* is the step of initiating the calibration process, and it occurs *at the computer*. Thus, the *Manual* can not anticipate the Claims.

3. The Examiner Ignores the Dependent Claims

Appellant argued in the *Appeal Brief* not only that the independent Claims are patentably distinct from the cited reference, but also that the dependent Claims are patentably distinct. According to 37 CFR § 41.37(c)(1)(vii), Appellant respectfully submits that the Board should consider the patentability of all the Claims, as they were not grouped together.

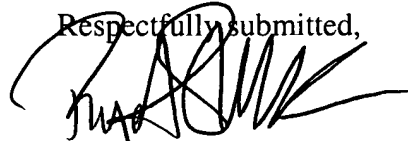
In the *Examiner's Answer*, the Examiner appears to ignore the novelty of the dependent Claims. Other than copying and pasting the rejections in the *Final Office Action*, the Examiner fails to mention the reasoning for rejecting the dependent Claims. For example, Claims 45, 49, and 53 recite that “the step of initiating the calibration process at a location distant the computer comprising pushing a button of a remote control device.” The cited reference does not disclose, suggest, or teach a remote control device.

Appellant respectfully requests that the Board consider all the Claims separately, for the Claims are not grouped together. Because Appellant separately argued all the Claims, and each Claim argument was placed under its own subheading, the Board respectfully should not select a group of Claims to determine patentability, but instead should review each Claim separately.

CONCLUSION

In view of the foregoing, it is respectfully submitted that pending Claims 41-42 and 44-53 are patentable over the cited reference. Reversal of the final rejection under 35 U.S.C. § 102, and another issuance of a *Notice of Allowance* for pending Claims 41-42 and 44-53, are thus respectfully requested.

Respectfully submitted,

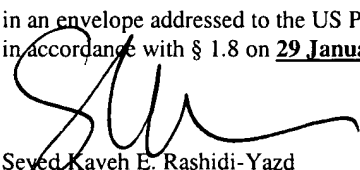


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